REMARKS

This response is intended as a complete response to the Office Action dated April 19, 2005. In the Office Action, the Examiner noted that claims 1-29 are pending in the application and that claims 1-5, 9-15, 19, 21, 22, 24-29 are rejected. The Examiner objected to claims 6-8, 16-18, 20 and 23. The Applicant has cancelled claims 5, 15, 25-29. In view of the following discussion, the Applicant believes that the remaining claims are in allowable form.

I. OBJECTIONS

The Examiner has objected to dependent claims 6-8, 16-18, 20 and 23 as being dependent upon a rejected base claim, but allowable if rewritten in independent form. Applicant thanks the Examiner for indicating allowable subject matter, but believes the claims are allowable without all the limitations of these claims. Thus, Applicant respectfully requests the matter be allowed.

II. REJECTIONS

A. 35 U.S.C. § 102(e) Claims 1-3, 5, 11-14, 21, 26 and 27

The Examiner has rejected independent claims 1-3, 5, 11-14, 21, 26 and 27, as anticipated by U.S. patent No. 6,650,282 ("Martikka") under 35 U.S.C. § 102(e). The rejection is respectfully traversed.

The Examiner contends that Martikka teaches a method and apparatus of locating position of a satellite signal receiver, comprising: a satellite signal receiver for receiving a plurality of satellite signals, a microcontroller for determining a Doppler offset for each of a plurality of satellite signals relative to the satellite signal receiver at a first time, and computing a position of the satellite signal receiver using the Doppler offset for each of the plurality of satellite signals.

Applicant has amended claim 1 to positively recite:

"A method of locating position of a satellite signal receiver, comprising:

determining a Doppler measurement for each of a plurality of satellite signals relative to the satellite signal receiver at a first time;

computing an initial position of the satellite signal receiver using the Doppler measurement for each of the plurality of satellite signals.

forming Doppler residuals using the initial position and the Doppler measurements for each of the plurality of satellite signals;

relating the Doppler residuals to a change in the initial position; and

computing an update of the initial position." (emphasis added)

Independent claim 11 has been amended to contain similar limitations to claim 1. Martikka computes a position using "pseudo-distances" (pseudoranges) for all the satellites and is devoid of any teaching of using Doppler residuals or relating such Doppler residuals to a change in initial position to calculate the position of the satellite signal receiver. Since Martikka lacks at least one element of the Applicant's independent claims, Martikka does not anticipate the Applicant's invention under 35 U.S.C. §102(e).

Claims 2, 3, 12-14, and 21 depend, directly or indirectly, from independent claims 1 and 11 and recite additional limitations therefor. Since Martikka does not anticipate independent claims 1 and 11, dependent claims 2, 3, 12-14 and 21 are not anticipated and allowable.

Applicant has canceled claims 5, 15, 26 and 27 without prejudice, and reserves the right to reassert those claims in a future divisional or continuation application.

B. 35 U.S.C. § 102(b) Claims 1 and 11

The Examiner has rejected independent claims 1, 2, 10, 11 and 24 under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,181,275 ("Chenebault"). The Applicant respectfully disagrees.

The Examiner contends that Chenebault teaches a method of locating a position of a satellite signal receiver, comprising: determining a Doppler offset for each of a plurality of satellite signals relative to the satellite signal receiver at a

first time and computing a position of the satellite signal receiver using the Doppler offset for each of the plurality of satellite signals.

As discussed above, Applicant has amended independent claims 1 and 11 to include computing the position of the satellite signal receiver from a Doppler residuals. Chenebault teaches using a conventional process of determining position using satellite signals by determining pseudodistances from the satellites to the receiver and pseudospeed of the satellites. Chenebault is devoid of any teaching of forming Doppler residuals, relating the residuals to a change in initial position and then calculating the position of the satellite signal receiver from the Doppler residuals. Since Chenebault does not teach every element of the Applicant's invention, Chenebault does not anticipate independent claims 1 and 11. Claims 2, 10 and 24 depend, directly or indirectly, from independent claims 1 and 11 and recite additional limitations therefor. Since Chenebault does not anticipate independent claims 1 and 11, dependent claims 2, 10 and 24 are not anticipated and allowable.

C. 35 U.S.C. § 103(a) Claim 4

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as unpatentable over Chenebault in view of U.S. Patent Application Publication 2004/0203865 ("Krasner"). Claim 4 depends from independent claim 1. As discussed above, Applicant's claim 1 positively recites forming Doppler residuals and relating those residuals to a change in initial position:

Chenebault, as mentioned above, is devoid of any teaching of forming Doppler residuals, relating the residuals to a change in position and then computing the location of the satellite signal receiver from the Doppler residuals. Similarly Krasner is devoid of any teaching of forming or using Doppler residuals. Since the method of locating the position of the satellite signal receiver in both Chenebault and Krasner is devoid of any teaching of computing the location of the satellite signal receiver from Doppler residuals, the combination of

Chenebault and Krasner does not teach the subject matter of Applicant's independent claim 1. Claim 4 depends from independent claim 1. Since the combination does not teach or suggest the limitations of independent claim 1, claim 4 which depends from claim 1 is not obvious and allowable.

D. 35 U.S.C. § 103(a) Claims 9 and 22

The Examiner has rejected claims 9 and 22 under 35 U.S.C. § 103(a) as unpatentable over Chenebault in view of U.S. Patent Application Publication 2004/0203865 ("Krasner"). Claim 9 depends from independent claim 1 and claim 22 depends from independent claim 11.

As discussed above, neither Chenebault nor Krasner teaches forming Doppler residuals and relating the residuals to a change in initial position to determine an update to an initial position. The combination of Chenebault and Krasner does not teach or suggest the limitations of independent claims 1 and 11. Therefore claims 9 and 22 which depend from claims 1 and 11 are not obvious and allowable.

E. 35 U.S.C. § 103(a) Claims 15 and 19

The Examiner has rejected claims 15 and 19 under 35 U.S.C. § 103(a) as unpatentable over Martikka in view of U.S. Patent No. 6,597,311 ("Sheynblat"). Applicant has rewritten independent claim 11 to include the limitations of dependent claim 15 and canceled claim 15. Claim 19 depends directly from rewritten independent claim 11. In view of the following discussion, Applicant believes claims 11 and19 are allowable.

The Examiner contends that Sheynblat teaches using a sub-millisecond pseudorange to correct the internal clock bias estimate. The Examiner contends that combining the teachings of Sheynblat with those of Martikka teaches the Applicant's invention. The Applicant's respectfully disagree. As discussed above, independent claim 11 has been amended to include forming Doppler residuals and relating the residuals to a change in initial position. In section IIA above; Martikka was shown not to teach such a process. Sheynblat teaches the

use of a traditional pseudorange matrix for computing position. There is no teaching of forming Doppler residuals or relating them to a change in initial position. As such, a combination of Martikka and Sheynblat is devoid of any teaching or suggestion of at least one element of claim 11. As such, claim 11 and its dependent claim 19 are not obvious in view of the references and are allowable. Therefore, the combination does not teach the limitation of independent claim 11. Thus, claim 19 which depends from claim 11 is not obvious and allowable.

F. 35 U.S.C. § 103(a) Claims 25, 28, and 29

Applicant has canceled independent claims 25, 28 and 29 without prejudice. As such, the rejection is moot. Applicant reserves the right to file these claims in a divisional or continuation application.

CONCLCUSION

Thus, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issuance are earnestly solicited.

If, however, the Examiner believes that any unresolved issues still exist, it

is requested that the Examiner telephone Mr. Raymond R. Moser Jr. at (732) 935-7100 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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